

Remarks

In the last Office Action, claims 2-19 received objections for their dependent claim format. Claims 2-19 have been amended in the manner suggested in the Office Action to overcome the objections.

Claim 12 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In the rejection, it was contended that the elongate channel recited in line 5 of the claim did not have proper antecedent basis. However, an elongate channel is positively recited in line 2 of the claim. Therefore, claim 12 does comply with requirements of 35 U.S.C. §112, second paragraph.

Claims 1, 15, and 19 were rejected under 35 U.S.C. §102(b) as being anticipated by the disclosure of the U.S. Patent of Graf, et al. No. 5,137,478. Of the rejected claims, claim 1 is the only independent claim with claims 15 and 19 each depend directly from claim 1. It is respectfully submitted that the method of the invention recited in independent claim 1 is not identically disclosed by the Graf reference, and therefore the reference does not anticipate the subject matter of claim 1 or its dependent claims 15 and 19.

“For a prior – art reference to anticipate, every element of the claimed invention must be identically shown in a single reference”. In re Bond, 910 F2d 831, 15 USPQ 2d 1566 (Fed Cir 1990).

The Graf reference does not disclose every element of the claimed method, and therefore does not anticipate claim 1. In the Graf reference, a heat shrink sleeve 22 is positioned over an electrical terminal member 20, and then a portion of the sleeve is shrunk over the terminal member as shown in Figure 1. The stripped end of a wire 14 is then inserted into the sleeve. Heat is then applied simultaneously to the sleeve 22 and the terminal connector 20 to solder the end of the wire 14 to the connector 20 and heat shrink the remainder of the

sleeve 22 around the wire. This process is explained in column 5, lines 26-68 of the Graf reference.

In contrast to the above, claim 1, as amended herein, requires positioning a sleeve over an electrical conductor, then positioning an exposed end of the conductor adjacent a terminal, then securing the conductor exposed end to the terminal, then moving the sleeve along the electric conductor to a position in which a portion of the sleeve is adjacent the terminal and a portion of the terminal is left exposed outside the sleeve. The Graf reference makes no disclosure of these steps, and in particular the last steps of the method recited in claim 1. Thus, the Graf reference fails to identically disclose every element of the invention recited in claim 1, and does not anticipate claim 1. Claim 1 and its dependent claims 15 and 19 are therefore allowable over the Graf reference.

Claims 1-9 and 15-19 were rejected under 35 U.S.C. §102(e) as being anticipated by the U.S. Patent of Ito No. 6,658,735. However, the Ito reference does not disclose or suggest the method steps of the invention now recited in amended claim 1.

More specifically, the Ito reference does not disclose or suggest moving the sleeve along the electric conductor to a position in which a portion of the sleeve is adjacent the terminal and a portion of the terminal is left exposed outside the sleeve. The Itoh reference actually teaches away from this method by shrinking the tube 15 over the connector 10 and both wire ends (e), and therefore does not anticipate or make obvious the subject matter of claim 1 as amended herein. It is therefore respectfully submitted that claims 1-9 and 15-19 are allowable over the prior art of record.

Claims 1, 15 and 19 were rejected under 35 U.S.C. §103(a) as being obvious in view of the disclosure of the Graf reference. It is argued in the rejection that it would be inherent to move the sleeve of the Graf reference along the electric conductor to a position in which a portion of the sleeve is adjacent the terminal in order to protect the outer connection portion.

Using the Graf connector in the manner described in the rejection is in contrast to the intended manner of using the Graf connector described in the reference, and therefore would not be obvious in view of the Graf reference disclosure. The Graf reference specifically sets forth that it is desirable to secure the sleeve to the terminal before the wire is secured to the terminal. The Graf reference specifically describes placing the protective sleeve 22 about the solder connector end section 28 of the terminal 20 and then applying a limited heat source to an end portion of the main sleeve body 42 to cause shrinkage of that portion of the sleeve body to create the stepped portion 52 shown in Figures 1 and 2. The Graf reference states that this is the form in which the sealed solder wire connector assembly 12 would be sold in kit form (column 5, lines 26-38). Thus, the Graf reference specifically teaches attaching the sleeve to the connector before the electrical connector is attached to the connector. Thus, the sleeve would not be movable along the electric conductor after a portion of the conductor has been secured to the terminal as recited in claim 1. Because the proposed use of the Graf connector and sleeve set forth in the obviousness rejection of claims 1, 15 and 19 is in contrast with the intended use set forth in the Graf reference, the proposed use would not be obvious to the ordinary skilled artisan. Claims 1, 15 and 19 are therefore allowable over the prior art.

Claims 10-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over the Graf reference or the Itoh (sic) reference in view of the disclosure of the U.S. Patent of Dohi No. 5,025,554. In the rejection, the Dohi reference is relied on for its disclosure of a connector having a configuration similar to that recited in claims 10 and 11. The Dohi reference was not relied on for overcoming the shortcomings of the Graf and Itoh references set forth above. It is therefore respectfully submitted that the combination of the Graf or Itoh references with Dohi does not overcome the shortcomings of the Graf and Itoh references set forth above with regard to independent claim 1, and therefore the subject matter of claims 10-14 that depend from independent claim 1 would not be obvious in view of the combined teachings of the three references.

It is respectfully submitted that in view of the amendments and remarks presented herein, claims 1-19 currently pending in the application are allowable.

Respectfully submitted,

Thompson Coburn LLP

By: Joseph M. Rolnicki
Joseph M. Rolnicki
Reg. No. 32,653
One US Bank Plaza
St. Louis, MO 63101-1693
(314) 552-6286